United States Patent [19]

Ota

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[54] **ELECTROPHORETIC DISPLAY DEVICE OF THE LUMINESCENT TYPE**

[75] Inventor: **Isao Ota**, Osaka, Japan

[73] Assignee: **Matsushita Electric Industries Co., Ltd.**, Kadoma, Osaka, Japan

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[52] **U.S. Cl.**..... **315/150**, 178/7.87, 313/54, 313/108 A, 313/108 R, 313/109.5

[51] **Int. Cl.**..... **H05b 33/00**, H05b 43/00

[58] **Field of Search**... 313/108 A, 108 R, 109.5, 54, 313/92; 178/7.87; 315/169 TV, 150; 204/299 PE

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Primary Examiner—Palmer C. Demeo

[57] **ABSTRACT**

An electrophoretic display and/or recording device of the luminescent type in which a luminescent electrophoretic suspension layer including a dispersion of at least one electrophoretic material in a finely divided powder form suspended in a suspending medium is interposed between a pair of electrodes. Said suspension layer includes at least one luminescent component therein and emits luminescent light when radiation flux or electric field is applied thereto. An electric field is imposed across the electrophoretic suspension layer to change the luminescent property of the suspension layer by changing the spatial distribution of the electrophoretic material in the suspending medium elctrophoretically.

39 Claims, 25 Drawing Figures